

FROM : Memry-Schetky

FAX NO. : 207-236 7784

Nov. 17 2005 07:10PM P2

## Affidavit

State of ME  
County of KNOX

BEFORE ME, the undersigned authority, a Notary Public of the State of Oregon, this day personally appeared L. McD. Schetky, Ph.D., P.E., Affiant, who, upon being first sworn by me, deposed and stated the following:

1. Affiant's full name is Lawrence McDonald Schetky, and his residence is:  
318 Molynaux Rd,  
Camden, Maine 04843
2. Affiant's business address is:  
3 Berkshire Blvd  
CT,  
Bethel, ME 06801
3. Affiant is a former Technical Director of The International Copper Research Association.
4. Affiant initiated research efforts on copper based Shape Memory alloys, which were carried out in universities in the United States, Australia, Belgium and the United Kingdom and investigated copper-based shape memory alloys, such as Cu-Zn, Cu-Zn-Al, Cu-Al-Ni, Cu-Mn and others.
5. Affiant has over four decades of research experience in copper based Shape Memory alloys.
6. Affiant is familiar with the basic metallurgy of CuAu alloys.
7. Affiant states that it is well known that Au and Cu form a completely miscible series of disordered solid solutions, and the alpha phase, which forms on solidification, has the fcc (A1) structure isotypic with copper.
8. Affiant states that it is well known that at low temperatures, various ordering of the basic lattice are found, which in some cases is associated with a slight distortion of the basic cubic symmetry to tetragonal or orthorhombic symmetry.
9. Affiant states that it is well known that such a system must exhibit a martensitic phase transformation in order to exhibit the shape memory effect of a Shape Memory alloy.
10. Affiant states that there is no evidence that any combination of Au and Cu is capable of exhibiting a martensitic phase transformation; therefore, in the opinion of Affiant, a metallurgist, who works with Shape Memory alloys and possesses ordinary skill, would know that there is no possibility of any combination of Au and Cu exhibiting the shape memory effect.

FURTHER, AFFIANT SAYETH NAUGHT.

*Lawrence McDonald Schetky*  
Signature of Affiant

SUBSCRIBED and SWORN TO before me this 17 day of Nov, 2005, by Serena Wilson who is personally known to me or who did produce the following identification The Drivers License

*Serena M. Wilson*  
NOTARY PUBLIC

My Commission Expires: Feb. 18, 2012

SERENA M. WILSON  
Notary Public, Maine  
My Commission Expires February 18, 2012

Not Considered  
for 12/2/05